

Title (en)  
ADHESIVE CONDUCTIVE PASTE

Title (de)  
KLEBENDE LEITFÄHIGE PASTE

Title (fr)  
PÂTE CONDUCTRICE DE LIAISON

Publication  
**EP 4012726 A1 20220615 (EN)**

Application  
**EP 20850274 A 20200804**

Priority  
• JP 2019145510 A 20190807  
• JP 2020029758 W 20200804

Abstract (en)  
An object of the present disclosure is to provide a paste that can suppress fluctuations in viscosity at a printing temperature to perform printing without unevenness, and is sintered fast even in an inert gas atmosphere such as nitrogen to form a highly accurate conductive wiring and a joined structure excellent in joining strength. The present disclosure provides an adhesive conductive paste for forming a conductive wiring and/or a joined structure to connect electronic elements, the adhesive conductive paste including a conductive particle and a solvent. The adhesive conductive paste contains, as the conductive particle, a silver particle (A) having an average particle size of 1 nm or greater and less than 100 nm and a silver particle (B) having an average particle size of 0.1 μm or greater and 10 μm or less, the silver particle (A) being a silver nanoparticle having a configuration in which a surface is coated with a protective agent containing amine, and the adhesive conductive paste contains, as the solvent, a compound (C) represented by Formula (I) below:  
$$\text{Ra-O-(X-O)}_{n\text{</sub>}\text{-R}_{b\text{</sup>}} \dots \quad (\text{I})$$
where in Formula (I), R<sup>a</sup> represents a monovalent group selected from a hydrocarbon group having from 1 to 6 carbon atom(s) and an acyl group, X represents a divalent group selected from a hydrocarbon group having from 2 to 6 carbon atoms, R<sup>b</sup> represents a hydrogen atom or a monovalent group selected from a hydrocarbon group having from 1 to 6 carbon atom(s) and an acyl group, R<sup>a</sup> and R<sup>b</sup> may be the same, n represents an integer from 1 to 3.

IPC 8 full level  
**H01B 1/22** (2006.01); **H05K 3/10** (2006.01)

CPC (source: EP KR US)  
**C09J 1/00** (2013.01 - US); **C09J 9/02** (2013.01 - US); **C09J 11/06** (2013.01 - US); **H01B 1/22** (2013.01 - EP KR); **H01B 13/0036** (2013.01 - KR); **H05K 1/097** (2013.01 - EP); **H05K 3/10** (2013.01 - KR); **C09J 2203/326** (2013.01 - US); **H05K 3/12** (2013.01 - EP); **H05K 3/321** (2013.01 - EP); **H05K 2201/0224** (2013.01 - EP); **H05K 2201/0272** (2013.01 - EP); **H05K 2203/0783** (2013.01 - EP)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 4012726 A1 20220615**; **EP 4012726 A4 20230823**; CN 114270453 A 20220401; JP WO2021025003 A1 20210211; KR 20220042428 A 20220405; TW 202113876 A 20210401; US 2022275247 A1 20220901; WO 2021025003 A1 20210211

DOCDB simple family (application)  
**EP 20850274 A 20200804**; CN 202080055959 A 20200804; JP 2020029758 W 20200804; JP 2021537313 A 20200804; KR 20227007043 A 20200804; TW 109126511 A 20200805; US 202017632880 A 20200804